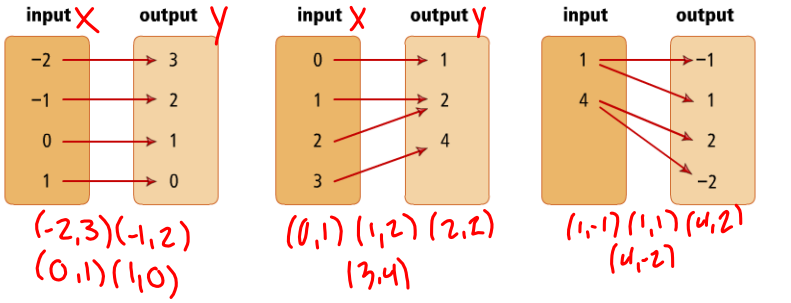
Watch Topic Opener Video

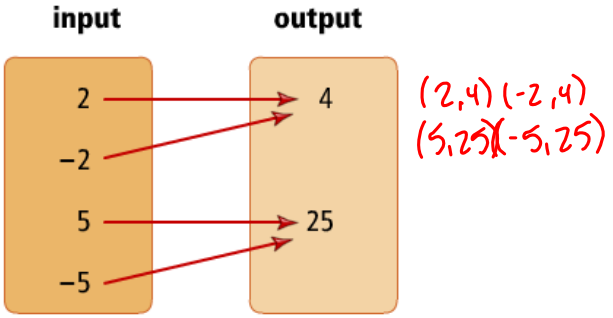
Example

Match each set of ordered pairs with its mapping diagram.



Got It?

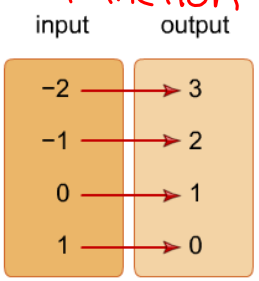
Name the set of ordered pairs represented by the mapping diagram.



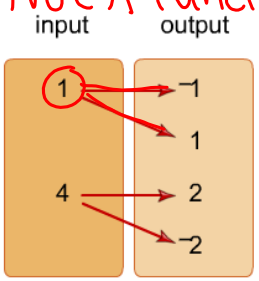
Which table represents a function and how do you know?

A **function** is a rule for taking each input value and producing exactly one output value.

Function



Not A Function



Example

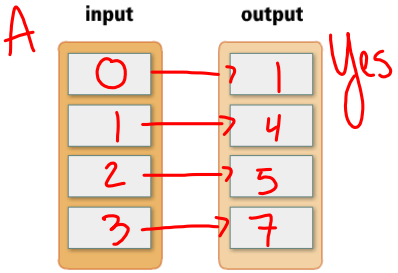
Which relations are functions? Use a mapping diagram to explain your reasoning.

(a) {(0, 1), (1, 4), (2, 5), (3, 7)}

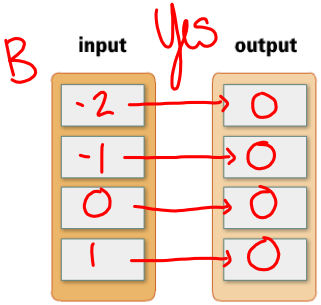
(b) {(–2, 0), (–1, 0), (0, 0), (1, 0)}

(c) {(0, –1), (0, 3), (1, 2), (3, 2)}

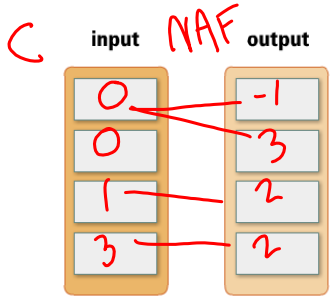
A



B



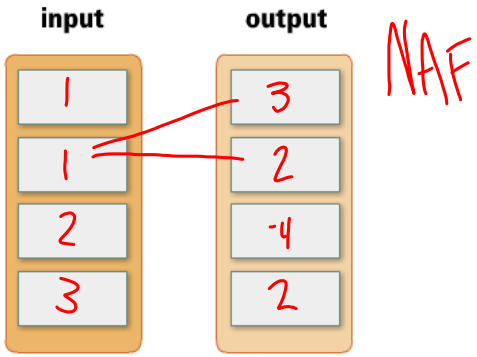
C



Got It?

Is the relation a function? Use a mapping diagram to explain your reasoning.

{(1, 3), (1, 2), (2, –4), (3, 2)}



NAF

Example

Is each relation a function? Explain.

a. NAF

input	output
1	3
1	2
2	–4
3	2

b. Function

input	output
–3	–5
–2	–5
–1	–5
0	–5

c. Function

input	output
0	12
1	14
2	16
3	18

Got It?

Is the relation a function? Explain.

input	output
–5	–5
–3	–3
1	1
2	2

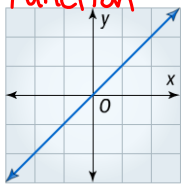
Function

Watch Part 4 Video

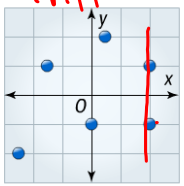
Example

Use the vertical line test to determine if each graph represents a function.

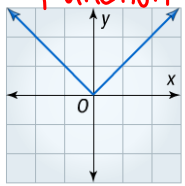
a. Function



b. NAF



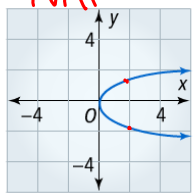
c. Function



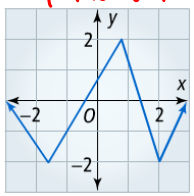
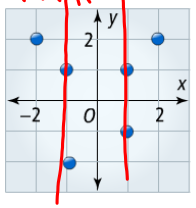
Got It?

Use the vertical line test to determine which graphs represent functions.

I. NAF



II. Function



III. NAF